

CONSTRUCTION OF ADCRE VECTORS

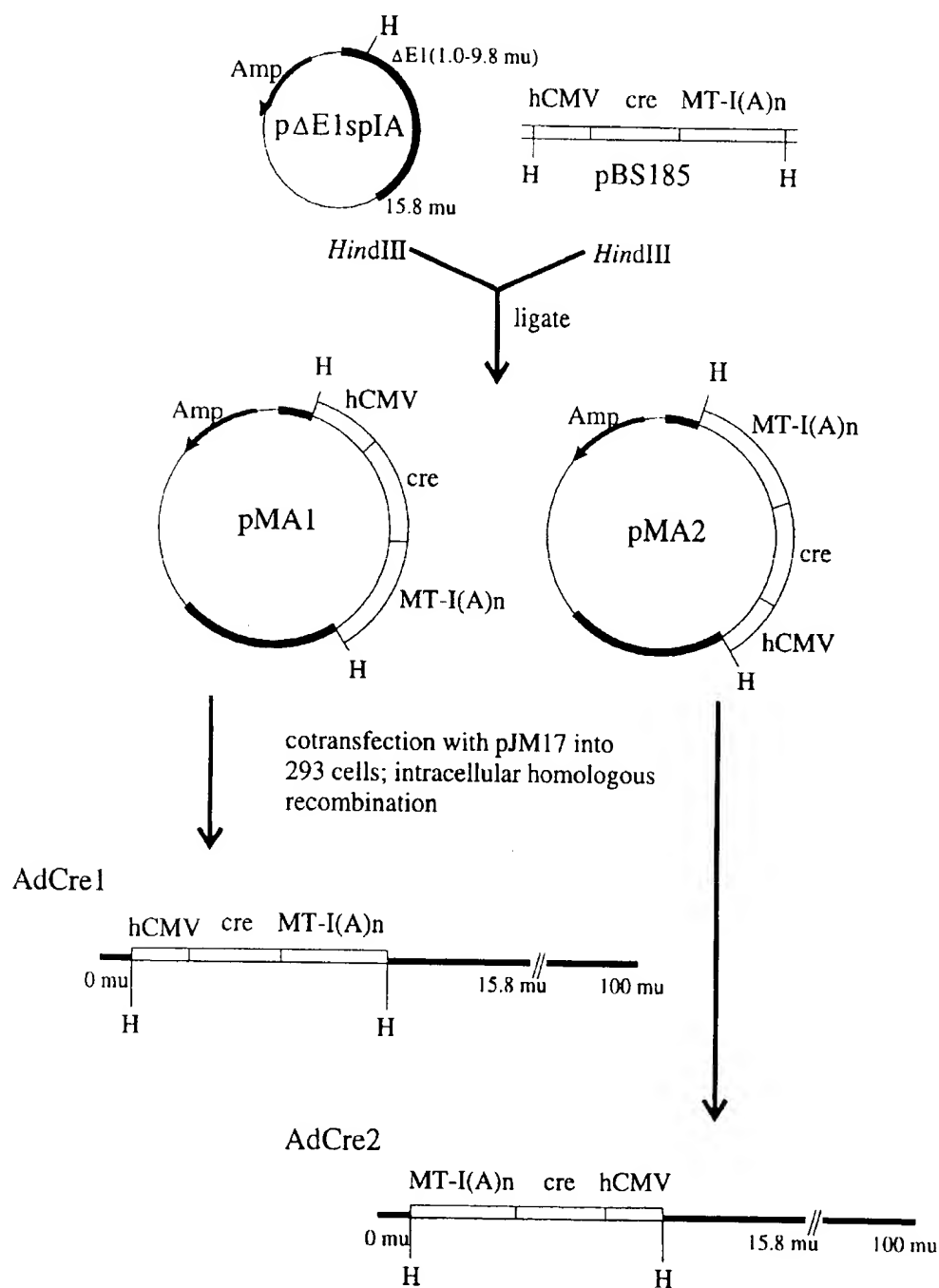


FIGURE 1

EXPRESSION OF CRE RECOMBINASE IN CELLS INFECTED WITH ADCRE

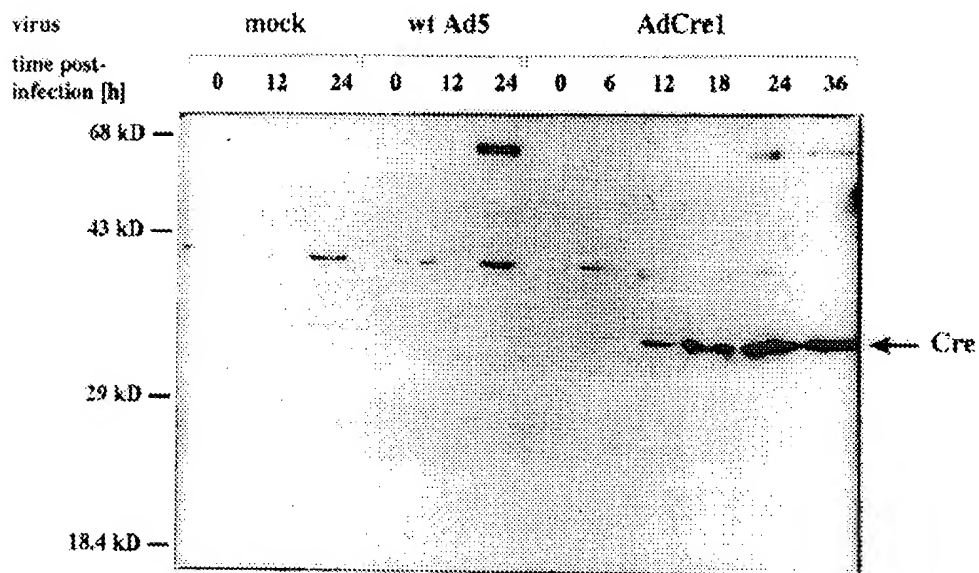


FIGURE 2

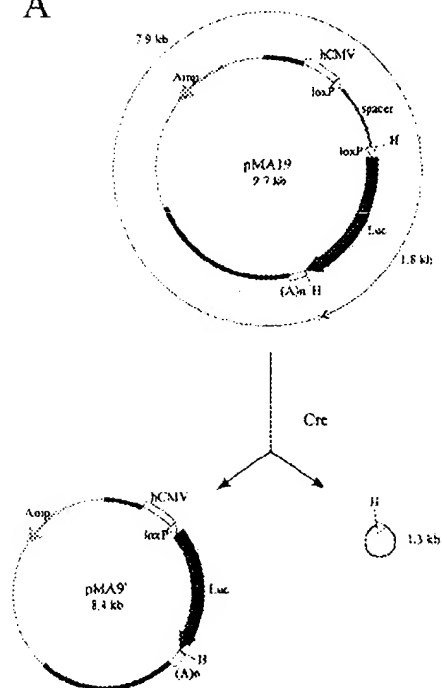
[illegible]

Diagram illustrating the construction of the AdCMV-19 vector. The process starts with the pCMV18 vector, which is partially digested with SmaI and NotI. This is followed by a ligation step using a linker (L) and a BamHI (B) site. The resulting intermediate vector is then partially digested with SmaI and NotI, and a linker (L) and a BamHI (B) site are added. The final step is a ligation step using a linker (L) and a BamHI (B) site, resulting in the AdCMV-19 vector. The diagram shows the circular plasmid vectors and the linear DNA fragments involved in each step.

FIGURE 3

CRE MEDIATED RECOMBINATION

A



B

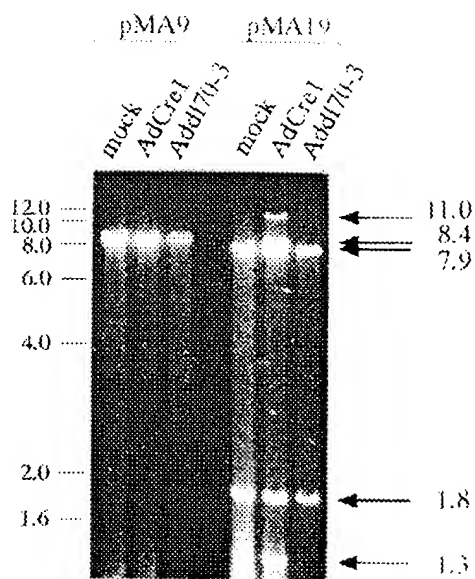
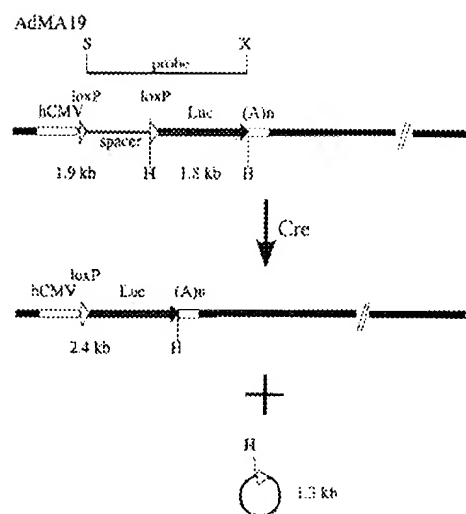


Figure 4

EXCISION OF SEQUENCES FROM ADMA19 IN CELLS COINFECTED WITH ADMA19 AND ADCRE

A



B

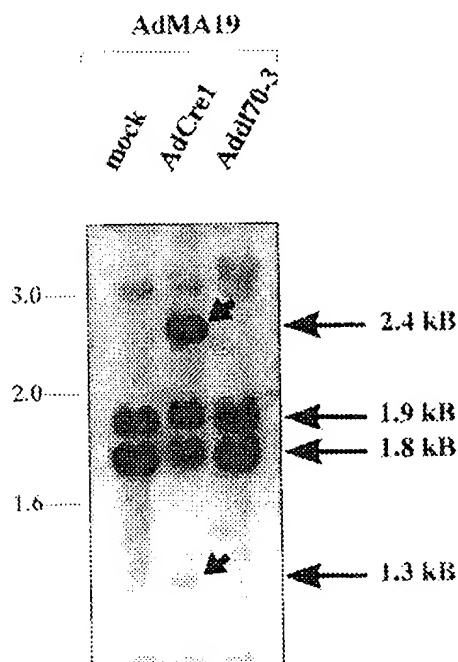
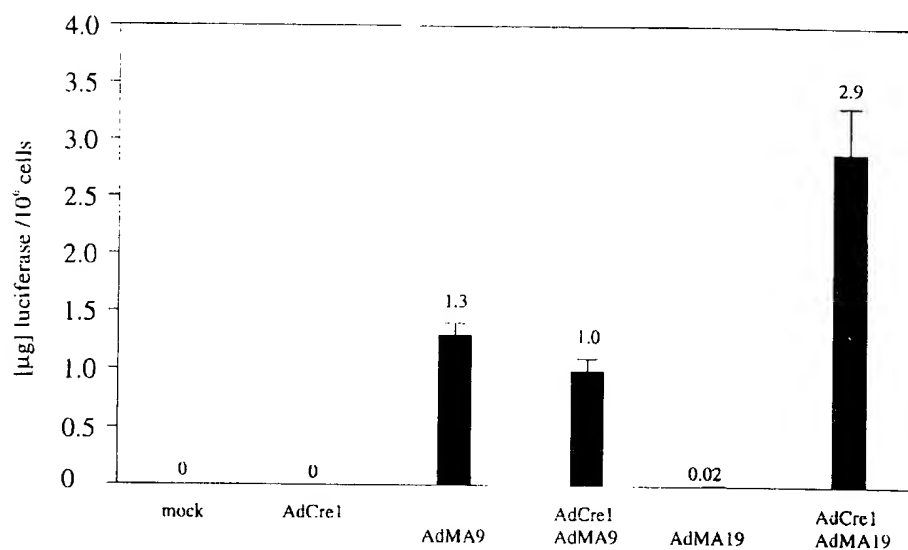


FIGURE 5A,B

EXPRESSION OF LUCIFERASE IN AD VECTOR INFECTED CELLS

Expt. 1



Expt. 2

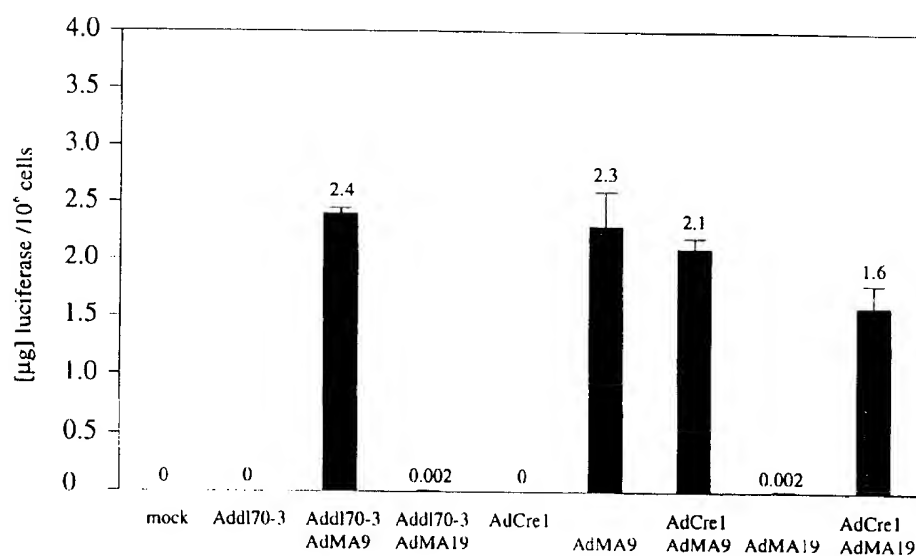
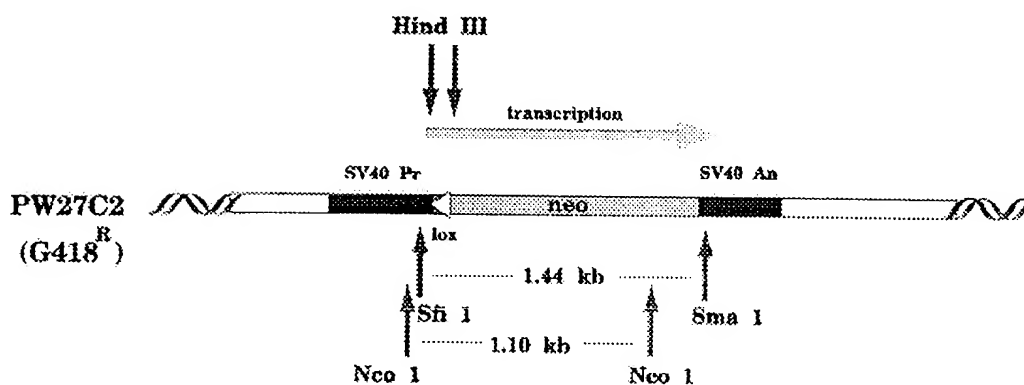


FIGURE 5C

STRUCTURE OF INTEGRATED SEQUENCES IN CELL LINE PW27C2



EXPRESSION OF NEO RESULTING IN G418 RESISTANCE

FIGURE 6A

SOUTHERN BLOT HYBRIDIZATION ANALYSIS OF DNA FROM CELL LINES INFECTED WITH ADCRE

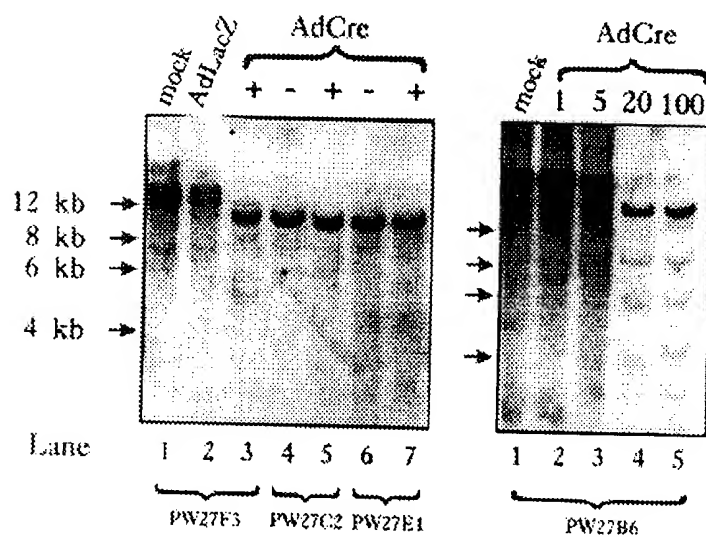


FIGURE 6C

CRE-MEDIATED INSERTION OF A PLASMID ENCODING HISD SEQUENCES INTO THE LOX SITE OF CELL LINE PW27C2

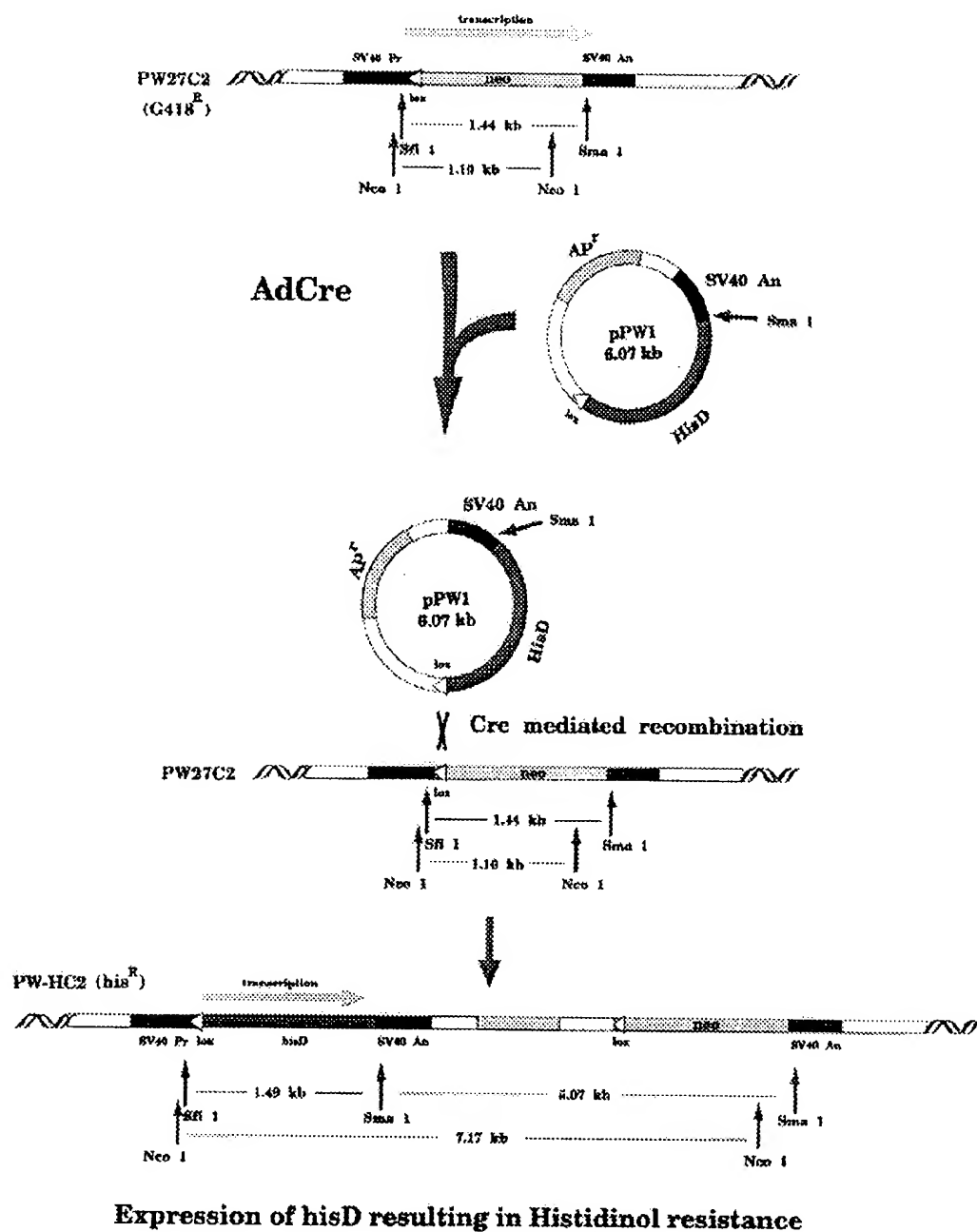


FIGURE 7A

**SOUTHERN BLOT HYBRIDIZATION ANALYSIS OF CELL LINES
DERIVED BY CRE MEDIATED INTEGRATION OF pPW1**

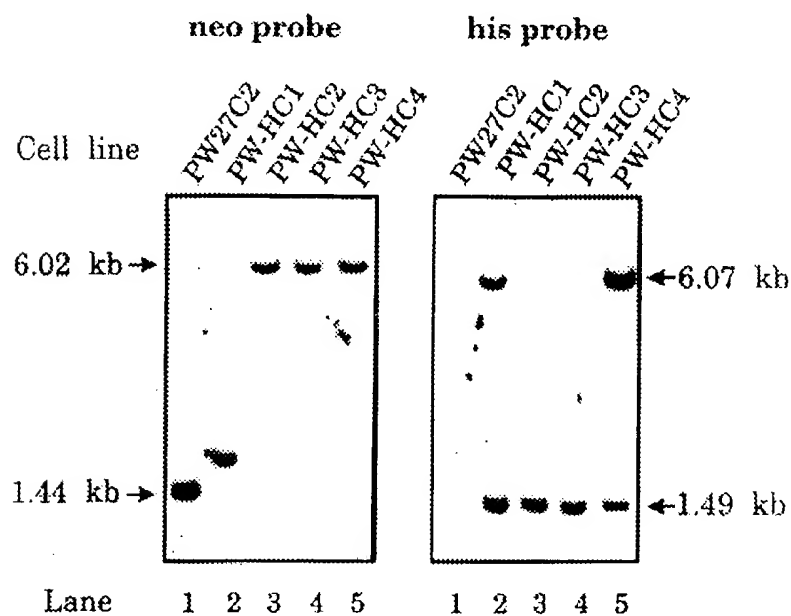


FIGURE 7B

**SOUTHERN BLOT HYBRIDIZATION ANALYSIS OF CELL LINES
DERIVED BY CRE MEDIATED INTEGRATION OF pPW1**

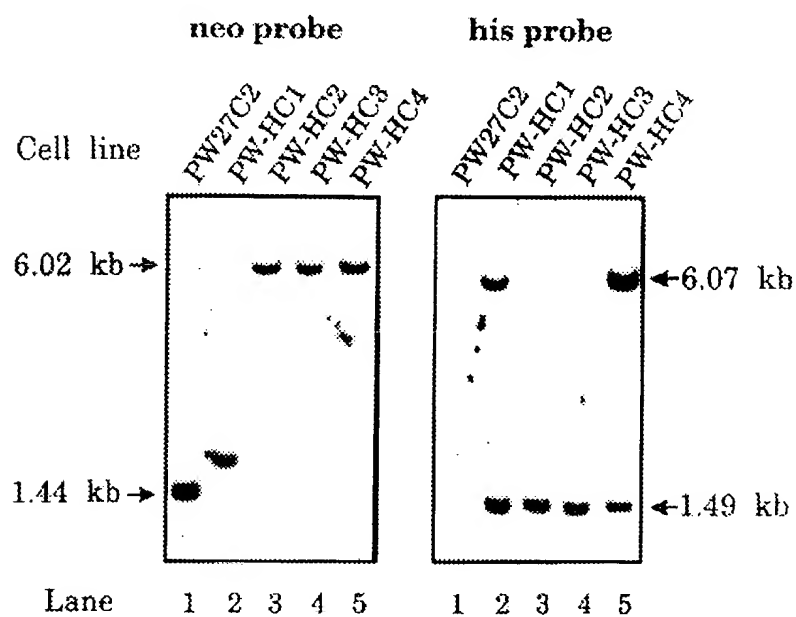
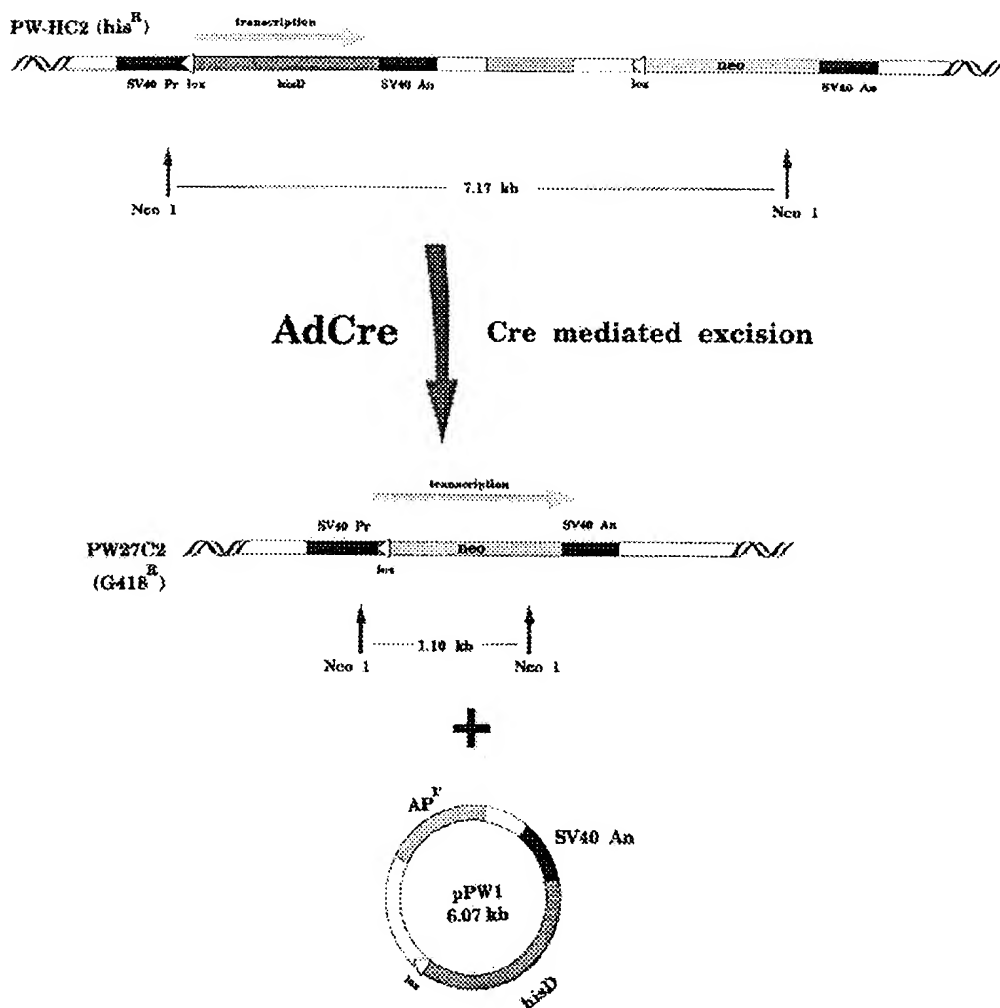


FIGURE 7B

CRE-MEDIATED EXCISION OF DNA CONTAINING hisD SEQUENCES FLANKED BY LOX SITES



**Loss of hisD expression (Histidinol sensitive)
Gain of neo expression (G418 resistant)**

FIGURE 8A

Conversion of HisD resistant cells to
G418 resistant cells by infection with AdCre

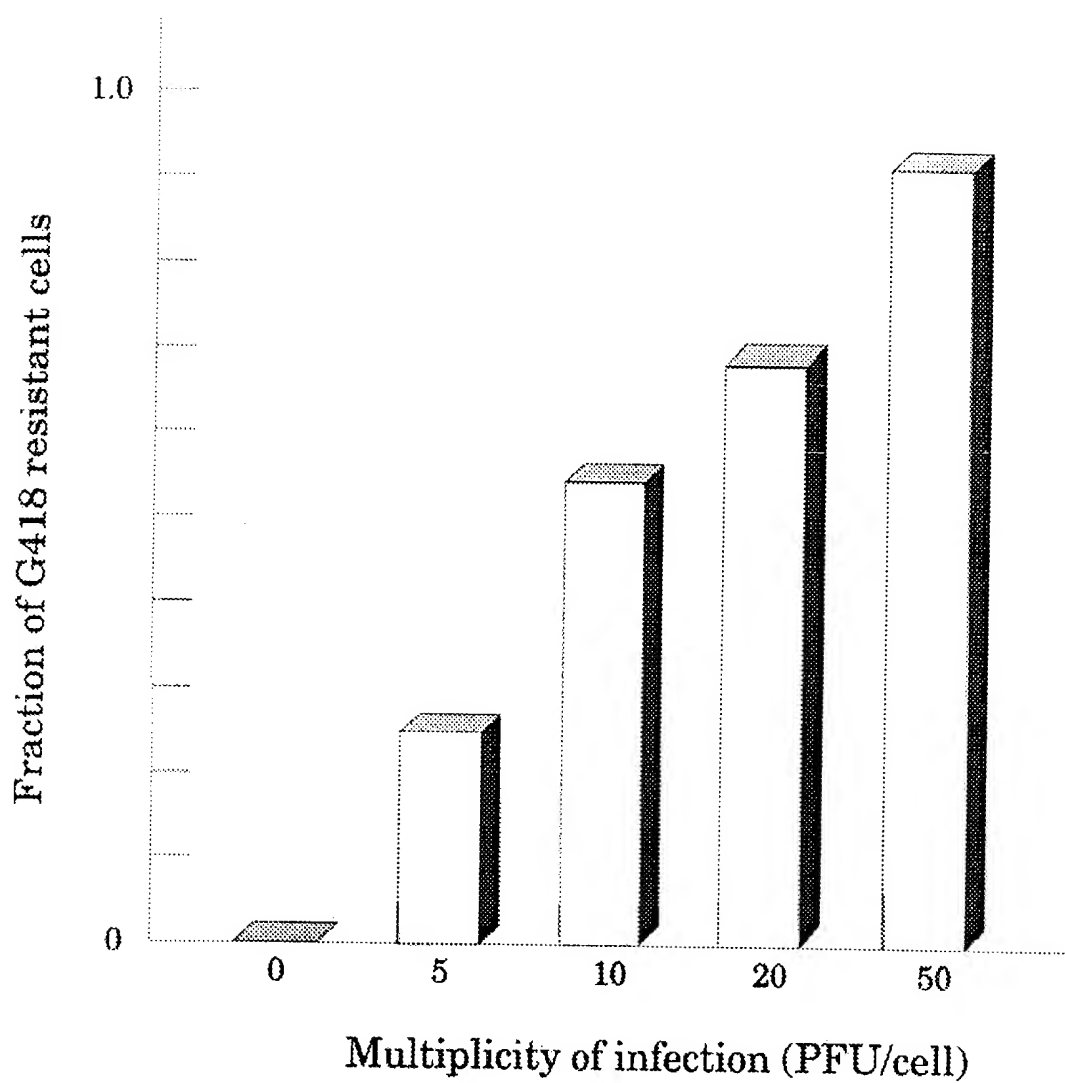
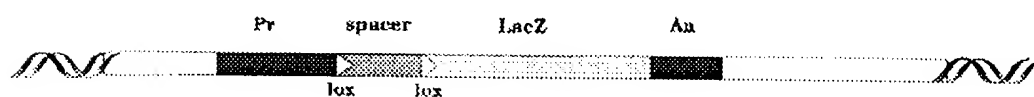
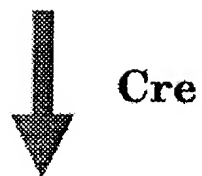
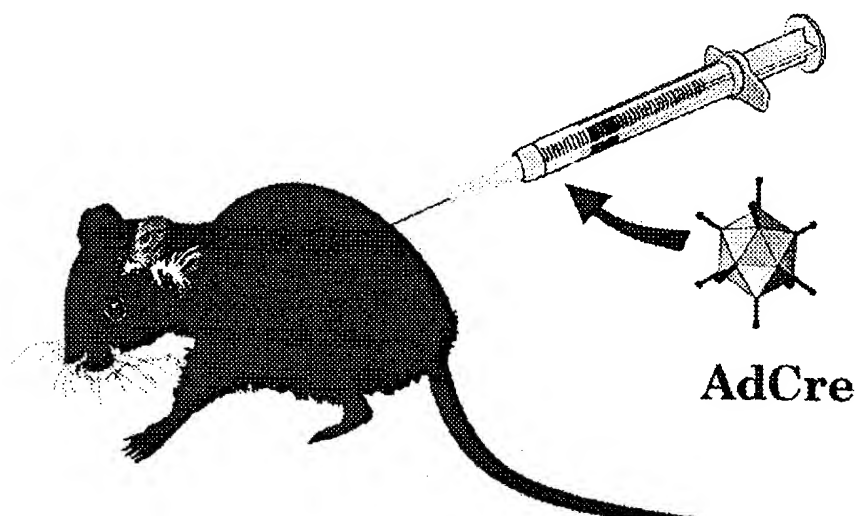


FIGURE 8B

IN VIVO GENE EXPRESSION CONTROLLED BY A MOLECULAR SWITCH



TRANSGENICS CONTAINING GENES CONTROLLED BY A MOLECULAR SWITCH



EXPRESSION OF β -Gal, Rb, P53, Neu ETC.

Figure 9